

**Amendments to the Specification:**

Please replace paragraphs 10 and 19 of the present application with the following amended paragraphs:

**[0010]** Co-pending, commonly assigned, patent application serial no.

[ ]10/692,225, filed herewith, entitled “System And Method For Object Persistence In A Database Store” (Attorney Docket: MSFT-2852/306819.1), which is hereby incorporated by reference in its entirety, describes another feature of UDTs in which the fields and behaviors of a CLR class definition for a UDT are annotated with storage attributes that describe a layout structure for instances of the UDT in the database store. Specifically, each field of a CLR class that defines a UDT is annotated with a storage attribute that controls the storage facets of the type, such as size, precision, scale, etc. In one embodiment, this is achieved by annotating each field with a custom storage attribute named SqlUdtField(). This attribute annotates fields with additional storage directives. These directives are enforced when the object is serialized to disk. In addition, every managed behavior (e.g., a method that can be invoked on the UDT object, for example, to return the value of a field) defined in the CLR class is annotated with an attribute that denotes an equivalent structural access path for that managed behavior. In one embodiment, the custom attribute used for this purpose is named SqlUdtProperty(), and the database server (e.g., SQL SERVER) assumes that the implementation of properties annotated with this custom attribute will delegate to a field specified as part of the attribute definition. This lets the server optimize access to the property structurally without creating an instance and invoking the behavior on it.

**[0019]** Referring again to Figure 2, when an application generates a query that includes a predicate or an expression that references a managed behavior of a UDT object that has been persisted in the database store (e.g., a behavior that returns the value of a field of the UDT object), the persisted object must be de-serialized (sometimes also referred to as “hydrating”) and the CLR must allocate memory for the full object in order to receive its stored values. The CLR must then invoke the actual method (*i.e.*, behavior) of the UDT class that returns the value(s) that is the subject of the query. As described in the aforementioned

**DOCKET NO.:** MSFT-2850  
**Application No.:** 10/692,227  
**Office Action Dated:** January 4, 2005

**PATENT**

co-pending application serial no. [ ]10/692,225, (Attorney Docket: MSFT-2852/306819.1), the SqlUdtField() and SqlUdtProperty() annotations in the CLR class definition of a UDT can be used by the database server to also allow direct structural access to the values of certain UDT fields without the need for object hydration.